

Title (en)  
COUPLING SLEEVE FOR A HYDRAULIC COUPLING

Title (de)  
KUPPLUNGSMUFFE FÜR EINE HYDRAULIKKUPPLUNG

Title (fr)  
MANCHON D'ACCOUPLEMENT POUR ACCOUPLEMENT HYDRAULIQUE

Publication  
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Application  
**EP 16797876 A 20161116**

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Abstract (en)  
[origin: WO2017085130A2] The invention relates to a coupling sleeve (1) for a hydraulic coupling on a hydraulic fluid line, the coupling sleeve being used to produce a form-locking connection to a coupling connector (2). The sleeve has a housing (3) and a sealing unit (4), the housing (3) having a flow channel (5) for hydraulic fluid and a coupling axis A and the sealing unit (4) having a sleeve body (6), a pressure sleeve (7) and a valve lifter (8). The sealing unit (4) delimits part of the flow channel (5) and the valve lifter (8) is held on the sleeve body (6) by a lifter guide (9) such that said valve lifter (8) is arranged in the flow channel (5). The pressure sleeve (7) surrounds the valve lifter (8) and said pressure sleeve (7) is held so that it can be displaced along the coupling axis A between a closing position, in which the flow channel (5) is closed by the pressure sleeve (7) and an opening position, in which the flow channel (5) is released by the pressure sleeve (7). The pressure sleeve (7) is spring-loaded in the direction of the closing position by a compression spring (10) and a coupling force must be exerted by a user in order to produce a form-locking connection to a coupling connector (2). To produce a coupling sleeve (1) which is improved with respect to safety and ease of operation, the dimensions of the surfaces from which a force results that acts on the pressure sleeve (7) in the direction of the closing position, at least in the closing position of the pressure sleeve (7) under a pressure p that is present in the flow channel (5), is selected such that a predetermined first threshold value for the coupling force is exceeded above a predetermined, upper pressure value of the pressure p, in order to prevent a user from producing a form-locking connection to a coupling connector (2).

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